

## CLAIMS

I claim:

5           1. A footwear manufacturing system, comprising:  
a scanner for taking measurements of a foot;  
a means for creating a foot profile based upon said measurements;  
a manufacturing station for receiving said foot profile and creating an insole  
based upon said foot profile.

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2. The footwear manufacturing system of Claim 1, wherein said manufacturing  
station is comprised of:

a mold; and

15           a forming unit within said mold, wherein said forming unit creates a positive  
impression of said foot based upon said foot profile for creating an upper portion of  
said insole.

20           3. The footwear manufacturing system of Claim 2, wherein said forming unit  
includes a plurality of pins that are adjustable to reflect said positive impression of said  
foot.

25           4. The footwear manufacturing system of Claim 3, wherein said forming unit  
includes a membrane positioned upon said plurality of pins.

5. The footwear manufacturing system of Claim 4, wherein said membrane is comprised of a resilient material.

5           6. The footwear manufacturing system of Claim 5, wherein said mold is comprised of a first portion containing said forming unit and a second portion containing a cavity for defining a lower portion of said insole.

10           7. The footwear manufacturing system of Claim 6, wherein said means for creating a foot profile is comprised of a computer system.

15           8. The footwear manufacturing system of Claim 7, wherein said computer system transmits said foot profile to said manufacturing station via a global computer network.

20           9. A method of producing a custom insole for footwear, comprising the steps of:  
          (a) taking measurements a foot;  
          (b) creating a foot profile based upon said measurements;  
          (c) transferring said foot profile to a manufacturing station; and  
          (d) producing said custom insole from said foot profile.

25           10. The method of producing said custom insole for footwear of Claim 9, wherein said step (d) producing said custom insole is comprised of the following steps:

          (i)     generating a positive impression within a mold based upon said foot profile;

- (ii) injecting a liquid resin into said mold formed upon said positive impression; and
- (iii) removing said custom insole after said liquid resin has hardened.

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11. The method of producing said custom insole for footwear of Claim 10, wherein said step (i) generating a positive impression comprises the steps of:

- (A) manipulating a plurality of pins beneath a membrane within a forming unit of said mold to reflect said positive impression; and
- (B) resetting said plurality of pins after said step (iii) is completed.

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12. The method of producing said custom insole for footwear of Claim 11, wherein step (c) transferring said foot profile utilizes a global computer network.

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